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ECOPERTH: A SMALL RURAL COMMUNITY TAKES ACTION ON CLIMATE CHANGE

Introduction

EcoPerth, a community-based project, shows how a small rural town can respond to the issues of climate change, and in the process make the town an “eco-efficient” community. The project concentrates on the Town of Perth (population 6,000) in Eastern Ontario, although focusing more on the community, rather than municipal boundaries.

Partnering with local businesses, groups and individuals, *ecoPerth* is about making projects happen. By identifying a wide range of innovative projects and assisting in their implementation, *ecoPerth*:

- encourages environmental sustainability
- promotes economic efficiency
- fosters community health

By using a community-based ground-up approach *ecoPerth* involves all sectors of the town. The outcomes are threefold:

- reduce the community's total greenhouse gas emissions by at least 20%
- weave a consideration of community sustainability into the fabric of the community
- document and disseminate the project's process and results

Process

EcoPerth began in 1998 with the help of funds from the newly formed Federal Climate Change Action Fund. A year was spent on informing key individuals and groups in the community about the project, soliciting letters of support and formulating a proposal. The project was approved for funding starting in March of 1999. Canada Mortgage and Housing Corporation also became involved early on, co-sponsoring *ecoPerth* to help prepare and share the model action plan for reducing greenhouse gas emissions with similar small towns across Canada.

One of the first steps taken was to persuade the Town to join the Partners for Climate Change initiative, and to start an inventory of community greenhouse gas emissions, using the *Partners for Climate Protection Program* software model. This inventory, together with a random survey of 100 residents, creates a baseline against which the cumulative impact of the many *ecoPerth* projects can be measured. This is a vital step, as it is often difficult or impossible to quantify the direct impact of some initiatives, or to account for cumulative and integrated benefits. Follow-up inventory and survey work will take place in the coming year, once some of the larger impact initiatives are fully implemented.

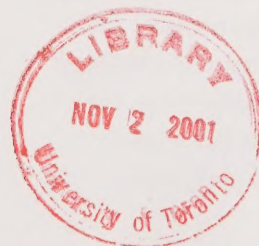
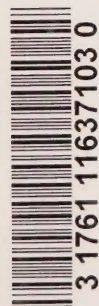
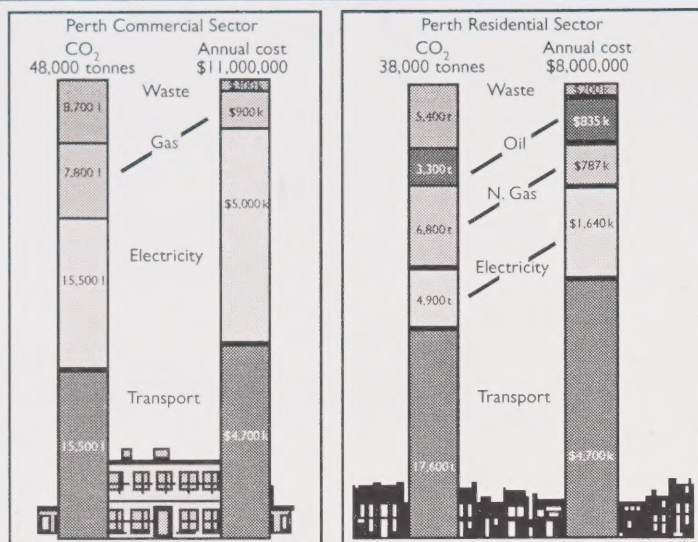


Figure 1: Community Wide CO₂ Emissions



	Residential		IC&I		Total	
	tonnes CO ₂	Cost	tonnes CO ₂	Cost	tonnes CO ₂	Cost
Electricity	4,883	\$1,640,523	15,536	\$5,219,226	20,419	\$6,859,749
Natural Gas	6,804	\$785,537	7,798	\$901,209	14,600	\$1,687,746
Fuel Oil	3,301	\$834,653	367	\$92,739	3,668	\$927,392
Transportation	17,570	\$4,714,990	17,570	\$4,714,990	35,140	\$9,429,980
Waste	5,423	\$20,000	6,686	\$300,000	12,109	\$320,000
Total	37,981	\$7,996,703	47,955	\$11,228,164	85,936	\$19,224,867

The results of the inventory reveal that 86,000 tonnes of CO₂ are emitted annually, or about 14,250 kg of CO₂ a year for every resident of Perth. Transportation resulted in the most emissions with 46% in the residential sector and 37% in the commercial sector. But it is the astonishing amount of money, \$19 million a year, spent locally on energy-related activities that captured more attention from the public. Since approximately 90% of these expenditures leave the community, the notion of keeping money in the community by becoming more energy-efficient resonated with many groups and individuals, and helped get them on board. The results of the inventory are illustrated in Figure 1.

Another important early step was a community meeting that was held to identify which potential projects the community supported most. The meeting also provided input into a greenhouse gas reduction target that the residents felt was appropriate for Perth. Participants suggested a wide range of reduction targets, with

a median at approximately 20%, which is consistent with the target set by Partners for Climate Change municipalities, of which Perth became a member.

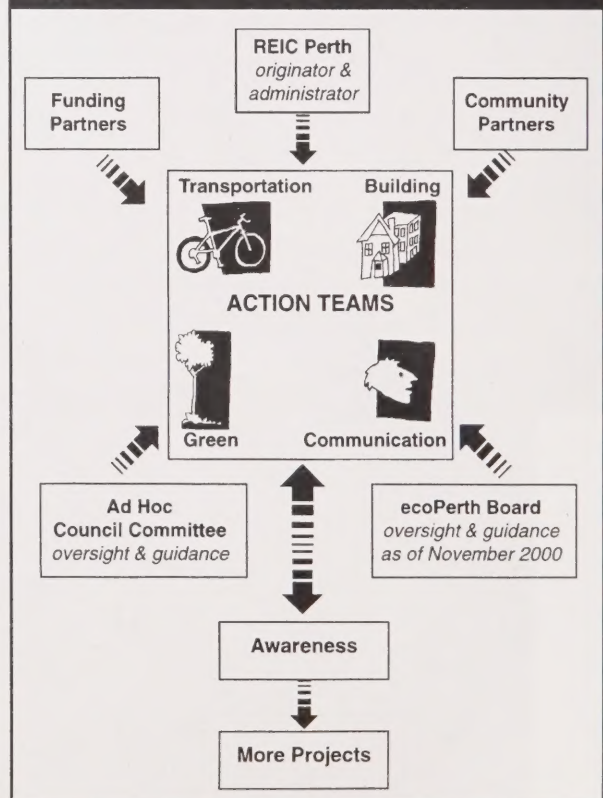
Using the input from the first community meeting, projects and volunteers were grouped into four "teams":

- Green Team
- Building Team
- Transportation Team
- Communications Team

The key projects for the four teams are listed in Figure 3.

A structure was also set up to monitor the activities, including an ad hoc committee of council. REIC Perth, a local environmental consulting firm provided management and coordination services for the project, including leaders for each of the four teams. External technical expertise was brought in on an as-needed basis. Figure 2 shows the organizational structure.

Figure 2



Rather than follow the normal planning—awareness—action process, *ecoPerth* chose to begin with actions. The community has been involved in several lengthy planning processes in the past decade, and all too often saw talk but no action. Since so many actions were clearly “win-win” initiatives, we saw the action approach as the best way to get people to truly understand the issues and become engaged in the process. Projects were prioritized based on the input received at the first community meeting, willingness of individuals or groups to step forward and champion projects, and the interests of the four teams.

In late 2000, with funding from the Climate Change Action Fund coming to an end, it was decided to incorporate *ecoPerth* as a not-for-profit organization to ensure an ongoing life for the project. It now has a board of directors that includes the Head of Public Works, the Chair of the Business Improvement Association (and owner of the local newspaper) and a local store owner and councilor in a neighbouring municipality.

Projects

The outline indicates the three main types of projects that were considered and implemented. To be successful, it is important to implement a mix of all three types as an integrated system rather than individual projects. It is the interaction of the different types of projects that makes for success.

Project Types

Cornerstone Projects

- Foundation for community sustainability
- High profile and highly visible symbol of community activity
- Possibility to engage a large number of people

Fabric Projects

- “no-brainers” (win-win, require few resources)
- targeted to particular audiences or sectors
- “fall in your lap” projects initiated from outside

Message Projects

- Awareness-building and fundamental communications
- Public consultation initiatives
- Crucial underpinnings of the overall program

It is also important to consider what makes a project move ahead. Based on the *ecoPerth* experience, four key factors were identified, as described below.

What Makes a Project Move Ahead?

Doable

- Required money, time and resources are available
- Likelihood of success is good

Champion

- To initiate the project
- Then keep it moving

Economic

- Direct benefits with measurable payback
- Makes it easier to sell

High Profile

- Increases awareness
- Be creative to create visibility

When implementing a multi-component project like this one, it is useful to consider periodic reviews, to ensure energy is directed appropriately and efficiently. What projects should be stopped because they look like they will die anyway? What projects can be left more or less alone (or with another group)? This will allow you to focus your limited resources on projects that will have the most impact.

Figure 3 shows a list of key projects that were implemented by each team. Next to each project is a star system that rates the project by impact, effort and awareness. While it is early yet to measure community-wide energy reductions, it is the intent of the project to monitor total energy consumption on an annual basis. In addition, some of the projects, like the retrofitting of municipal facilities, have their own built-in monitoring and evaluation or follow-up surveys.

Figure 3: Key Project by Each Team



Green Team

Planting trees, naturalizing the land & promoting local food

Pesticide-Free Action Kit

Helping people to get their lawn "off drugs" with a kit and lawn sign.

impact ★
effort ★
awareness ★★

Naturalizing School Yard

Helping an elementary school naturalize part of its yard & involve students.

impact ★
effort ★
awareness ★

Annual Spring Tree Sale

14,000 trees & shrubs sold since the spring of 2000 with a focus on energy-efficient landscaping



impact ★★★★★
effort ★★★★★
awareness ★★★★★

Front Yard Tree Shading

Providing free "caliper" trees for shading and energy-efficiency.

impact ★
effort ★
awareness ★

Local Flavour

Promoting local food production and consumption.

- Food Box Program: bringing local growers and consumers together
- Local Flavour: with food stores, bakeries, restaurants, & Farmers' Market
- Weekly Recipe column: featuring local flavour



impact ★★★★★
effort ★★★★★
awareness ★★★★★

Rainwater Conservation

Providing rainbarrels to reduce water use.

impact ★
effort ★
awareness ★

Landscape Naturalization

Naturalizing a portion of Perth's main park and working with industry to naturalize lawns.

impact ★
effort ★★
awareness ★★★



Building Team

Use less energy at home, work and play

EnerGuide for Houses

Detailed home audits to save energy, money, and improve comfort.

impact ★★
effort ★★★★★
awareness ★★

Solar Domestic Hot Water

Cut your hot water heating bill by 50% by using renewable solar energy.

impact ★★★
effort ★★★★★
awareness ★★★

Municipal Building Retrofit

Retrofit all Municipal facilities using the Energy Service Company (ESCO) model.

impact ★★★★★
effort ★★★★★
awareness ★★★

Community-Wide Retrofit

Providing businesses and institutions energy retrofits funded through energy savings.

impact ★★★★★
effort ★★★★★
awareness ★★★

District Heating

A study to determine the potential for district heating and combined heat & power.

impact ★★★★★
effort ★★★★★
awareness ★★★

Air-Conditioning Shading

Distribution of coupons for free shade trees and bushes through HVAC contractors.

impact ★
effort ★
awareness ★★

Christmas Light Timers

Provide timers for all downtown Christmas lights.

impact ★★
effort ★★
awareness ★★

Reel Lawnmower Promotion

Provide demo models for a "test drive" with discount coupons from local retailer.

impact ★
effort ★★
awareness ★★

Demonstration of Renewable Technologies

Developing a high-profile solar water heating system at the Indoor Pool.

impact ★★
effort ★★
awareness ★★★

First Class Across Canada

Engaging elementary classes in monthly take-home action list.

impact ★★
effort ★★★★★
awareness ★★★



Transportation Team

Finding innovative ways to simply get around

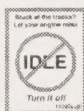
Perth Bicycle Users Group (PBUG)

PBUG formed to promote bikes as a viable, healthy and non-polluting alternative to cars. Includes bike clinics, workshops and rides

impact ★
effort ★★
awareness ★★

No Idling at the Tracks

Erecting No-Idle signs at railway crossings in town. Looking at a "No-Idling" By-law.



impact ★
effort ★
awareness ★★★★★

Bicycle Police Patrols

Increase bicycle patrols from one trial to four regular patrols.

impact ★
effort ★★
awareness ★★

Hybrid Vehicle Demonstration

Promoting alternatives to the conventional car.

impact ★
effort ★★
awareness ★

Bicycle Salvage at Landfill Site

An area for reusing and recycling old bicycles and parts.

impact ★
effort ★
awareness ★

Tire Pressure Clinics

Tires are checked and inflated to the proper pressure. Close to half of cars have underinflated tires, some dangerously so.

impact ★
effort ★★
awareness ★★

Walk-to-Work Campaign

A campaign and contest that promotes the joy of walking is. "Try it you'll like it!"



impact ★
effort ★★
awareness ★★

International Walk-to-School Day

All area primary and secondary schools involved in this program promoting alternatives to the car.

impact ★
effort ★
awareness ★

Car Pooling Promotion

Ride sharing and car pooling promotion to 600 households involved in soccer league.

impact ★★
effort ★
awareness ★★



Communication Team

Getting the word out & moving from awareness to action

Presentations

Customized presentations to local groups, clubs and schools.

impact ★
effort ★★
awareness ★★★★★

News From ecoPerth

A bi-weekly article in the Perth Courier letting the public know what we are doing.

impact ★★
effort ★
awareness ★★★★★

Personal Action Pledge

A simple checklist of things that people have already done and/or might do.

impact ★★
effort ★★
awareness ★★★★★

Municipal Guide to Greenhouse Gas Reduction

A manual for small and rural municipalities on engaging their community in sustainability.

impact ★
effort ★★★★★
awareness ★★

Quarterly Newsletter

A regular newsletters to inform the public and encourage them to action.

impact ★★
effort ★★
awareness ★★★★★

ecoPerth Web Site

Another way of communicating both locally and globally. <www.ecoperth.on.ca>

impact ★
effort ★★
awareness ★★

Public Meetings

General public meetings for information, education and consultation.

impact ★
effort ★★
awareness ★★★★★

Displays at Special Events

"Floats" in parades, booths at fairs, participation at other events

impact ★
effort ★★
awareness ★★

Articles and Press Releases

Preparing short articles and/or press releases on ecoPerth and local activities and events.

impact ★
effort ★
awareness ★★★★★

Lessons Learned

The analysis, consultation and project implementation processes reveal the following useful lessons:

- focus on action, not planning and studies
- let the community decide what projects are appropriate
- take big and little steps, whatever will fly
- encourage all sectors to get involved
- reach people in as many ways as possible
- emphasize the positive—fear is not a good motivator for action
- document community baselines, as it is often hard to quantify results from individual projects
- get others to take ownership by nurturing and supporting
- be patient—it can take considerable time for some projects to bear fruit
- provide ongoing feedback to the community on a job well done

Community Partners

The following is a list of *ecoPerth* partners:

- Corporation of the Town of Perth
- Downtown Heritage Perth Business Improvement Area
- Lanark and Leeds Green Community
- Perth Courier (local weekly newspaper)
- Algonquin College, Perth Campus
- REIC Perth
- many local businesses and groups
- Enbridge Consumers Gas
- Ontario Healthy Communities Coalition
- Green Communities Association
- Federation of Canadian Municipalities
- ICLEI Partners for Climate Protection
- Environment Canada
- Natural Resources Canada
- Canada Mortgage and Housing Corporation
- Climate Change Action Fund

Contact Information

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Housing Research at CMHC

Under Part IX of the *National Housing Act*, the Government of Canada provides funds to CMHC to conduct research into the social, economic and technical aspects of housing and related fields, and to undertake the publishing and distribution of the results of this research.

This fact sheet is one of a series intended to inform you of the nature and scope of CMHC's research.

To find more *Research Highlights* plus a wide variety of information products, visit our Website at

www.cmhc-schl.gc.ca

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